

What is claimed is:

1. An energy supply system, comprising:  
  
a solar panel to generate an input voltage from solar energy;  
  
a battery;  
  
an alternating current (AC) voltage booster coupled to the solar panel to receive the input voltage; and  
  
a DC regulator coupled to the AC voltage booster to charge the battery.
2. The charger of claim 1, further comprising an inverter to generate AC power.
3. The charger of claim 1, wherein the AC voltage booster is a pulse-width-modulation (PWM) voltage booster.
4. The charger of claim 1, wherein the input voltage comes from a solar cell.
5. The charger of claim 1, wherein the voltage booster doubles the input voltage.
6. The charger of claim 1, further comprising in one or more capacitors for storing the stepped-up voltage before applying the stepped-up voltage to the battery.
7. The charger of claim 1, further comprising a circuit to convert the stepped-up voltage to a stepped-up DC voltage.
8. The charger of claim 1, further comprising a frequency shifter to change a frequency of the AC voltage to avoid radio frequency interference.
9. The charger of claim 1, wherein the voltage booster is a charge pump.

10. The charger of claim 1, further comprising a DC regulator coupled between the voltage booster and the battery.
11. A method for supplying energy, comprising:  
  
receiving a direct current (DC) input voltage from a solar panel;  
  
converting the direct current input voltage into an alternating current (AC) voltage;  
  
stepping-up the AC input voltage; and  
  
applying the stepped-up voltage to the battery.
12. The method of claim 11, further comprising stepping-up the input voltage using pulse-width-modulation (PWM).
13. The method of claim 11, further comprising generating AC power from the battery.
14. The method of claim 11, wherein the input voltage comes from a solar cell.
15. The method of claim 11, wherein the stepping up the input voltage further comprises proximally doubling the input voltage.
16. The method of claim 11, further comprising storing the stepped-up voltage in one or more capacitors before applying the stepped-up voltage to the battery.

17. The method of claim 11, wherein the applying the stepped-up voltage further comprises converting the stepped-up voltage to a stepped-up DC voltage.
18. The method of claim 11, further comprising changing a frequency of the AC voltage to avoid radio frequency interference.
19. A system for charging a battery, comprising:
  - a solar panel to generate a direct current (DC) input voltage from solar energy;
  - means for converting the DC input voltage into an alternating current (AC) voltage;
  - means for stepping-up the input voltage and applying the stepped-up voltage to the battery.
20. The system of claim 19, further comprising means to convert the stepped-up voltage to a stepped up DC voltage.